ABSTRACT

A method for isolating nucleic acid molecules having a repeating nucleotide sequence or a homopolymeric nucleotide sequence, e.g. a poly A stretch, is described. In particular, the method uses oligomeric capture probes spiked with various amounts of locked nucleic acid (LNA). The invention further describes methods for the isolation of RNA molecules, for example polyadenylated mRNA molecules, which overcome the problems of rapid RNA degradation during isolation and analysis of such nucleic acid molecules. This is of major clinical and diagnostic importance, especially when dealing with RNA viruses, such as retroviruses or when analyzing rare or low-abundant mRNAs or mRNAs from biopsies or tissues enriched with RNases.